

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS PO Box 1430 Alexascins, Virginia 22313-1450 www.nepto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/537,846 | 01/04/2006 | Jin-Kyeong Kim | CU-4245 RJS | 8607 |
| 26530 7590 04/01/2009 LADAS & PARRY LLP 224 SOUTH MICHIGAN AVENUE | | | EXAMINER | |
| | | | LAM, DUNG LE | |
| SUITE 1600 CHICAGO, IL | . 60604 | | ART UNIT | PAPER NUMBER |
| | | | 2617 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 04/01/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/537.846 KIM ET AL. Office Action Summary Examiner Art Unit DUNG LAM 2617 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 13 August 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-10 is/are pending in the application. 4a) Of the above claim(s) _____ is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1-10 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 6/08/05 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date _

Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Notice of Draftsperson's Patent Drawing Review (PTO-948)

Attachment(s)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

Notice of Informal Patent Application

Application/Control Number: 10/537,846

Art Unit: 2617

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)–(d), which
papers have been placed of record in the file.

Information Disclosure Statement

 The Information Disclosure Statement submitted on 10/24/07, 2/13/06, 7/22/08 and 8/13/08 has been considered by the examiner (see attached PTO-1449 form).

Drawings

The drawings are objected to because Figures 1-3 and 5 contain numeric labels which make it hard to understand the invention. The examiner suggests adding alphanumeric labels to facilitate the understanding of the invention.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations from method claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

Application/Control Number: 10/537,846 Art Unit: 2617

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abevance.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Omum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 47.73(b).

4. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the corresponding claim 6 of the copending Application No. 10/537144. Claim 1b through 1c of 10/537846 corresponds to 6a through 6c of 10/537144 respectively. The only difference is 1a of 10/537846

Application/Control Number: 10/537,846

Art Unit: 2617

specifically requires that the position is from the base station in which one of the reference shows (see rejection below) that it is an obvious variance to store data either remotely at a base station or at a MS.

5. Claim 7 is are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the corresponding claim 1 of Application No. 10/537144. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 1 of the pending application has substantially the same limitations as the combined claims 7 of the co-pending claim. For easy reference the limitations are sequentially labeled from a through d. The correspondence of the claims is as followed.

Limitation 1c of application 10/537144 same as 7b of application 10/537846 Limitation 1a of application 10/537144 same as 7c of application 10/537846

Limitation 1d of application 10/537144 same as 7d of application 10/537846 Limitation 1b of application 10/537144 same as 7a of application 10/537846

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10 rejected under 35 U.S.C. 103(a) as being obvious over Gunnarsson et at (US Number 2003/0118015) in view of Souissi (US 2002/0187780).

 Regarding claim 1, Gunnarsson teaches in a method for searching a wireless LAN AP (access point) in a terminal having a wireless LAN module, a mobile Application/Control Number: 10/537,846 Art Unit: 2617

communication module, and a GPS receiving module installed therein, a method for automatically searching a wireless LAN AP comprising:

- (a) acquiring location information of the wireless LAN AP provided in a service area of a base station from the base station ([22])...
- (b) consecutively tracking a current location of the terminal through the GPS receiving module ([18, 19, 24, 25 and 28]);
- (c) determining a driving start time of the wireless LAN module through the location information of the wireless LAN AP acquired in (a) and the current location information of the terminal tracked in (b) ([22, 24, 25, 28]); and
- (d) driving the wireless LAN module to detect a beacon signal periodically output by the wireless LAN AP ([24, 28]).

However, **Gunnarsson** does not specifically teach acquiring the location information through the mobile communication module. In an analogous art, **Souissi** teaches position information of the WLAN access point are obtained through the mobile communication module (roaming table of containing geographic locations of preferred networks which can be a WLAN which contains AP [55], [0065-0067, 82-86]).

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine Gunnarsson's teaching of the MS to operate the WLAN module to detect a nearby access point with Souissi's teaching of obtaining the the AP location through the mobile communication module so that the AP location information can be stored locally and thus easily and quickly be compared the MS' position without having to query the information from the system thus minimize system resource usage.

Application/Control Number: 10/537,846 Page 6

Art Unit: 2617

2. Regarding claim 2, Gunnarsson and Souissi teach the method of claim 1, wherein (a) comprises: transmitting a location register/update message to the base station through the mobile communication module when the terminal reaches the service area of the base station; receiving a response/success/failure message on the location register/update process from the base station; and acquiring location information of the wireless LAN AP provided in the base station from the response/success/failure message received from the base station (Souissi, roaming table [55], [0065-0067, 82-86]).

- Regarding claim 3, Gunnarsson and Souissi teach the method of claim 1 or 2, wherein (b) is performed when the location information provided in the base station is acquired in (a) (Gunnarsson [22]).
- 4. Regarding claim 4, Gunnarsson and Souissi teach the method of claim 1 or 2, wherein the terminal stores the location information of the wireless LAN AP acquired in (a) in a specific AP location information depository (Souissi, roaming table [55], [0065-0067, 82-86]).
- Regarding claim 5, Gunnarsson and Souissi teach the of claim 1 or 2, wherein the location information of the wireless LAN AP comprises geographical location

Application/Control Number: 10/537,846 Page 7

Art Unit: 2617

information of the wireless LAN AP and radius of service information on the wireless LAN AP (Gunnarsson, from center of WLAN, [22, 23-28]).

- 6. Regarding claim 6, Gunnarsson and Souissi teach the of claim 5, wherein the driving start time of the wireless LAN module is determined by comparing the geographical location information of the wireless LAN AP, the radius of service information on the wireless LAN AP, and location information of the terminal tracked through the GPS receiving module (Gunnarsson, from center of WLAN, [22]).
- Regarding claim 7 and 10, they are apparatus claim and computer readable medium claims that correspond to claims 1 thus are rejected for the same reasons as claim 1.
- Regarding claim 8, it is apparatus claim that corresponds to claim 2 thus is rejected for the same reasons as claim 2.
- 9. Regarding claim 9, Gunnarsson and Souissi teach the terminal of claim 7, but do not explicitly teach wherein the wireless LAN AP is not automatically searched when the mobile communication module fails to acquire location information of the wireless LAN AP provided in the base station. However, the examiner notes Gunnarsson emphasized the concept of battery saving by not continuously searching for the WLAN ([0004 and 0017]). Therefore, it would have been obvious and common sense for one of ordinary skill in the art to design Gunnarsona and Souissi's teaching to not automatically

Application/Control Number: 10/537,846

Art Unit: 2617

search for WLAN if the location is not acquired in order to minimize battery consumption.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUNG LAM whose telephone number is (571) 272-6497. The examiner can normally be reached on M - F 9 - 5:30 pm, Every Other Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Harper can be reached on (571) 272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VINCENT P. HARPER/ Supervisory Patent Examiner, Art Unit 2617 Art Unit: 2617